

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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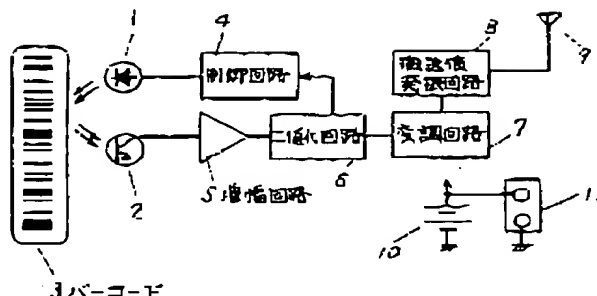
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APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

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TITLE : WIRELESS LIGHT PEN DEVICE



**ABSTRACT :** PURPOSE: To connect the titled device to a data processor through radio by providing a circuit for binarizing the signal of a read bar-code, an oscillating circuit and the modulating circuit of a carrier wave, and a chargeable battery, on a light pen device.

**CONSTITUTION:** When a light beam emitted from a light emission diode 1 is reflected by the white line part of a bar-code 3, the output of a phototransistor 2 becomes a 'white level'. This signal is amplified by an amplifier 5, also passes through a binarization circuit 6, becomes a binary data for signifying white, and a signal is supplied to a control circuit 4 and a modulating circuit 7. The output signal of the binarization circuit 6 is supplied to the modulating circuit 7, and a carrier wave signal oscillated by a carrier wave oscillating circuit 8 is modulated by the modulating circuit 7 and becomes a high frequency signal, and supplied to an antenna 9. In such a manner, by a signal obtained when the bar-code 3 is scanned, a carrier wave is modulated, and the read data of the bar-code 3 can be sent out by radio through an antenna.

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